TECHNICAL REVIEW DOCUMENT
For
Minor Modification to
OPERATING PERMIT 00OPDO225

to be issued to:

TransColorado Gas Transmission Company
Dolores Compressor Station
Dolores County
Source ID 0330019

Cathy Rhodes
January, 2004

I. PURPOSE:

This document will establish the basis for decisions made regarding the applicable requirements, emissions factors, monitoring plan and compliance status of emission units covered by the operating permit proposed for this site. It is designed for reference during the review of the proposed permit by the EPA, the public, and other interested parties. This narrative is intended only as an adjunct for the reviewer and has no legal standing. The conclusions made in this report are based on information provided in the original application received January 7, 2004.

Any revisions made to the underlying construction permits associated with this facility in conjunction with the processing of this operating permit application have been reviewed in accordance with the requirements of Regulation No. 3, Part B, Construction Permits, and have been found to meet all applicable substantive and procedural requirements. This operating permit incorporates and shall be considered to be a combined construction/operating permit for any such revision, and the permittee shall be allowed to operate under the revised conditions upon issuance of this operating permit without applying for a revision to this permit or for an additional or revised Construction Permit.

II. SOURCE DESCRIPTION:

This facility is located in Dolores County, on private land surrounded by the San Juan National Forest approximately 13 miles northeast of Dolores, Colorado and 0.6 miles east of Beaver Creek. The area is classified as attainment for all pollutants. Mesa Verde National Park is a Federal Class I designated area within 100 kilometers of the plant. Utah and New Mexico are affected states within 50 miles.

The Dolores Compressor Station is a natural gas transmission facility. Natural gas is compressed for transmission to sales pipelines using reciprocating engines driving gas compressors. Electrical power is also generated on-site, for use at the station, using reciprocating engines driving generators.

The facility is not subject to the requirements of 112(r) (Accidental Release Program).

III. Proposed Minor Permit Modification

The existing source consists of two Caterpillar engines and two Waukesha engines. The permittee proposes to add another Caterpillar engine.

Existing facility wide emissions are as follows:

Pollutant	Potential (TPY)
Nitrogen Oxides (NO_x)	66.1
Volatile Organic Compounds (VOC)	44.3
CO	155.1
Formaldehyde (Single HAP)	12.46
Total HAPs	15.9

Emissions from the new engine are as follows:

Pollutant	Potential (TPY)
Nitrogen Oxides (NO_x)	22.51
Volatile Organic Compounds (VOC)	16.08
CO	5.63
Formaldehyde	1.7
HAPs	3.2

Total facility wide emissions after the modification are as follows:

Pollutant	Potential (TPY)
Nitrogen Oxides (NO_x)	88.6
Volatile Organic Compounds (VOC)	60.4
CO	160.7
Formaldehyde (Single HAP)	14.1
Total HAPs	19.1

The source is still a true minor source for PSD purposes. The emissions from the new engine are less than the significant permit modification thresholds, therefore this modification qualifies as a minor permit modification.

S05 - Caterpillar G3612 LE Engine E379 – Natural gas fired compressor engine, site rated at 3,330 HP, equipped with oxidation catalyst to control CO emissions

Applicable Requirements: Applicable requirements are incorporated directly into this operating permit through a combined construction/operating permit process. Applicable requirements are as follows.

- Opacity not to exceed 20%, except during certain operating conditions, when opacity shall not exceed 30% (Colorado Regulation No. 1, Section II.A.1 and 4)
- Emissions of NO_x, VOC, and CO limited on a twelve month rolling basis
- Consumption rate of natural gas limited on a rolling twelve month basis

Emission Factors - Emission estimates are based on 1.2 times the manufacturer=s estimates. A source compliance test was performed for the existing Caterpillar engines on August 10, 2001. The Division is not requiring a test for this new engine.

Monitoring - The permittee will calculate monthly emissions based on fuel consumption and annual emissions for fee purposes based on hours of operation. The Division has developed specific monitoring guidance for Internal Combustion engines located in attainment areas, as shown on the attached grid titled "Compliance/Scenario Summary - Gas Fired IC Engines. The emission factors proposed are below AP-42 factors for NO_x, therefore, according to the monitoring grid, the source will be required to: conduct the emission calculations and record fuel use on a rolling twelve month basis; and perform quarterly portable monitoring. Monthly monitoring of catalyst parameters is required. The air/fuel ratio is regulated based on the btu content of the natural gas. The permittee will record annual hours of operation.

Compliance with the opacity limits is assumed when natural gas is used as a fuel.

IV. Alternate Operating Scenarios

The permittee is allowed to replace the permitted engines with temporary engines during periods of maintenance, repair, etc. In addition, the permitted engines may be replaced permanently. The operating permit sets forth specific provisions which must be met in order for the facility to use these Alternate Operating Scenarios. Replacement engines will be exact replicas of the permitted engines. The permit is revised to incorporate the most recent version of the Alternative Operating Scenario and to add the new engine.

V. Short Term Limits

On April 16, 1998 the Colorado Air Quality Control Commission directed the Division to implement new procedures regarding the use of short term emission and production/throughput limits on Construction Permits. These procedures are being directly implemented in all operating permits that had not started their Public Comment period as of April 16, 1998. This source is a true minor source, and air quality modeling indicates no

potential exceedance of air quality standards. Therefore, no short term limits are required.

VI. Ambient Impact Modeling

All pollutant emissions are below the modeling threshold rates, however, the permittee submitted ambient impact modeling results for NOx emissions with their application. Modeled results are as follows ($\mu g.m^3$):

Impact from all units	Background Concentration	Total Impact	National Ambient Air Quality Standard
62.4	9.41	71.8	100

The source will not cause or contribute to a violation of the NAAQS.

Note: The stack height of the two existing Waukesha generators is being extended five feet to assist in overcoming building downwash.

VII. Compliance Assurance Monitoring

The new engine is equipped with an oxidation catalyst to control CO emissions. Since the engine is not a large pollutant specific emission unit (i.e. potential controlled emissions, including limits in the Construction Permit, are less than 100 tons/year criteria pollutants and less than 10/25 tons year HAPS), the applicant is not required to submit a CAM plan until the permit is renewed (if applicable). Therefore, in accordance with the provisions of 40 CFR Part 64, as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV, the CEM engines are not subject to the compliance assurance monitoring (CAM) requirements at this time.

The existing engines do not use add on control devices to meet emissions limits, and thus are not subject to the CAM requirements.

VIII. Maximum Achievable Control Technology (MACT)

Based on information provided by this source, the Dolores Compressor Station is a major source of HAPs (i.e. facility-wide potential to emit greater than 10 tons per year of any single HAP or greater than 25 tons per year of all HAPs combined) for a covered source category (Stationary Reciprocating Internal Combustion Engines). The EPA has signed the final MACT rule for Reciprocating Internal Combustion Engines, therefore the rule will be incorporated into this operating permit in accordance with the appropriate operating permit reopening or renewal procedure.

VIII. Other Permit Revisions

The Division has made additional revisions to the permit to reflect current Division policy and to update regulatory cites. These revisions qualify as Administrative Permit Amendments. These revisions are listed in Appendix F of the permit.